DOCUMENT RESUME

ED 344 272 CS 507 801

AUTHOR Grice, George L.; Cronin, Michael W.
TITLE The Comprehensive Speech Communication Laboratory: We Have Ways of Making You Talk.
PUB DATE 11 Apr 92
NOTE 25p.; Paper presented at the Annual Meeting of the Southern States Communication Association (62nd, San Antonio, TX, April 9-12, 1992).
PUB TYPE Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Communication Skills; Higher Education; *Interpersonal Communication; Laboratories; Laboratory Training; Peer Teaching; *Speech Communication; Speech Instruction; Tutoring
IDENTIFIERS *Communication across the Curriculum; Radford University VA; Speech Communication Education; University of Rhode Island

ABSTRACT

Increasingly, business and education professionals recognize the centrality of oral communication in everyday activities, and such a competency is best developed through repeated instruction and application. However, few colleges or universities have implemented speech communication laboratories, and where they do exist, they are often constrained due to limited personnel and budgetary resources. Furthermore, there is little published information about speech communication laboratories. Radford University (Virginia) has implemented a comprehensive communication laboratory, administered through the Oral Communication Program (OCP), as part of its oral communication across the curriculum emphasis. Comprehensive oral communications labs, including those at Radford and at the University of Rhode Island, meet five criteria for comprehensiveness: they are open free to all students; they serve all university constituencies; they offer several types of instruction; they offer a wide range of instruction; and they use a wide range of instructional material. Peer tutors are employed who have completed an extensive training course for university credit. As research has confirmed, both tutors and tutees benefit from this kind of program, suggesting that peer tutoring is an appropriate pedagogy for communication competence training. By combining the use of computerized interactive video instruction and peer tutoring, Radford's OCP Laboratory is able to offer quality, convenience, and cost-effective oral communication instruction, practice, and evaluation for students throughout the university. (Thirty-three references are attached.) (HB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED344272

The Comprehensive Speech Communication Laboratory: We Have Ways of Making You Talk

George L. Grice
Professor of Communication
Coordinator, Oral Communication Program
Radford University

Michael W. Cronin
Professor of Communication
Director, Oral Communication Program
Radford University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
George Grice
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Paper presented at the annual meeting of the Southern States Communication Association, April 11, 1992, San Antonio

CS507801

BEST COPY AVAILABLE

The Comprehensive Speech Communication Laboratory:

We Have Ways of Making You Talk

ABSTRACT

Few colleges or universities have implemented speech communication laboratories. Where they exist, these laboratories are often constrained due to limited personnel and budgetary resources. Radford University has implemented a comprehensive communication laboratory, administered through the Oral Communication Program (OCP), as part of its oral communication across the curriculum emphasis. By combining the use of computerized interactive video instruction and peer tutoring, the OCP is able to offer quality, convenient, and cost-effective oral communication instruction, practice, and evaluation for students throughout the university.

This paper reviews the literature on speech communication laboratories and describes Radford University's OCP Laboratory as a resource for promoting oral communication competence in a university setting.

Since the time of Aristotle, scholars have stressed the importance of oral and written communication competencies as essential components of a liberal education. The average adult spends 80 percent of the waking day communicating. Approximately 70 percent of that time is spent speaking and listening (Barker, 1980). Throughout their college years, students are called on to give class presentations, work in pairs or in groups, participate in class discussions, and confer with their instructors. A Carnegie Foundation Report reinforces the importance of oral communication to learning:

> To succeed in college, undergraduates should be able to write and speak with clarity, and to read and listen with comprehension. Language and thought are inextricably connected, and as undergraduates develop their linguistic skills, they hone the quality of their thinking and become intellectually and socially empowered. (Boyer, 1987, p. 73)

Increasingly, business and education professionals recognize the centrality of oral communication in everyday activities. Recent surveys of major employers reveal that the quality most sought in job applicants is proficiency in oral and written communication (see, for example, Curtis, Winsor, & Stephens, 1989). Most introductory speech communication textbooks cite surveys or quote "experts" highlighting the importance of oral communication competence for personal and career success.

With this increasing recognition of the importance of communication comes the knowledge that most students can benefit greatly from a conscious effort to improve their oral communication. Oral communication competency is best developed through repeated instruction and application. The best way to learn this competency is in the college classroom, and most communication departments offer a well-rounded curriculum dealing with these areas. Yet, the need for oral communication assistance among faculty and students is greater than resources available through departmental speech classes can accommodate. Furthermore, most colleges and universities do not require all students to take a speech course, and most students seldom enroll in more than one.

In 1988, Radford University established a university-wide program using oral communication activities to (a) enhance learning of course content and (b) improve oral communication competence of participating students. The Oral Communication Program (OCP) was created to administer this approach to oral communication across the curriculum (OCXC). The rationale for an OCXC emphasis (Cronin, 1990; Cronin & Glenn, 1990a, 1990a, 1991; Hay, 1988; Roberts, 1983, 1984; Steinfatt, 1986) is based on the fact that most college students are not provided sufficient structured practice with competent evaluation to refine and reinforce their oral communication competence in courses across the

curriculum and therefore graduate with inadequate oral communication competence.

Most OCXC programs rely on non-speech faculty to provide oral communication instruction in C-I courses. Many non-speech faculty, however, lack sufficient academic preparation to design, implement, and evaluate oral communication activities effectively (Hay, 1988). In order to assist non-speech teachers in providing instruction in oral communication, the OCP uses a two-fold strategy: the communication consultant and a communication laboratory. A member of the speech communication faculty is assigned to serve as a consultant to instructors of communication-intensive (C-I) courses, non-speech courses in which a significant oral communication activity is used to enhance student learning. The consultant helps the course instructor design, implement, and evaluate oral communication activities appropriate to teaching specific course content.

A second method of providing needed theory and practice is through an oral communication laboratory. By combining interactive video instruction, peer tutoring, and other instructional resources, the OCP Laboratory is able to enhance students' communication competence in non-speech classes. Students in speech courses, especially introductory public speaking classes, also use the laboratory. This paper reviews the literature on speech communication laboratories and describes Radford

University's OCP Laboratory as a resource for promoting oral communication competence in the university setting.

THE COMPREHENSIVE SPEECH COMMUNICATION LABORATORY

Few colleges or universities have implemented speech communication laboratories. Where they exist, they are often constrained due to limited personnel and budgetary resources. Faculty time is too valuable to reallocate from the classroom to a laboratory, and few faculty are willing to staff a laboratory absent provisions for reassigned time or overload pay.

Published information about speech communication laboratories is limited. An ERIC computer search of articles and papers using the descriptors "communication laboratory," "oral communication laboratory," "speech communication laboratory," and "speech laboratory" generated only nine references from January 1982 through December 1991.

Of these references, three articles described interpersonal communication laboratories (Brownell, 1982; Ratliffe, 1984, 1989); one focused on a laboratory for non-native speakers of American English (Morris, 1987); another article discussed problem-solving training in a mass communication laboratory (Bennett, 1984); and one paper examined a two-day negotiation strategies laboratory (Jones, 1987). Each of these laboratories focused on a specific communication competency targeted to a specific clientele.

The remaining papers described more comprehensive oral communication laboratories. Geonetta (1981) detailed the Oral Communication Laboratory at the University of Missouri-Rolla, but this laboratory has since been discontinued. Brownell and Watson (1984) discussed the Speech Communication Laboratory at the University of Rhode Island. Now called the Speech Communication Center, it continues to thrive and has expanded its mission and services since it opened in 1983 (W. W. Brownell, personal communication, April 1, 1992).1 The final paper described the creation of Radford University's Oral Communication Program and included four paragraphs about its proposed laboratory (Glenn, Dobkins, Kennan, & Cronin, 1989).

Radford's Oral Communication Laboratory and Rhode Island's Speech Communication Center are comprehensive oral communication laboratories. Both models meet five criteria for comprehensiveness. First, they are open free of charge to all students. Although its primary mission is to support students in C-I courses, Radford's OCP Laboratory is available to students in any class. Most requests for tutoring at Radford, for example, come from students enrolled in public speaking classes. Students working on non-class speaking activities, such as speeches to campus or off-campus organizations and chairing club meetings, may also seek help at the laboratory. Although the University

1 For current information on the Center, write: Dr. Winifred W. Brownell, Associate Dean, College of Arts and Sciences, University of Rhode Island, Kingston, RI 02881; or call (401) 792-4107.

of Rhode Island does not have an OCXC program, its center is open to all students. A significant portion of the students using the Center's resources are international students.

Second, both laboratories serve all university constituencies. Faculty, staff, and administrators, as well as students, may use the laboratories. In addition, Rhode Island's Center serves alumni and, usually for a fee, will consult with business and professional organizations.

Third, both laboratories provide several types of oral communication instruction. Most Radford clients seek assistance in coping with speech fright and preparing and delivering a public presentation. However, support is also provided in listening, group discussion, debate, and interpersonal communication. The Rhode Island Center adds to these types of assistance a significant international component. Foreign students who are studying in America, as well as American students who will study abroad, receive instruction in how to communicate in different cultural environments.

Fourth, both laboratories offer a wide range of instruction. Each provides instruction to help clients prepare for oral communication activities, provides coaching and feedback during rehearsal stages, and provides evaluative and constructive feedback after the communication events. In order to be comprehensive, speech communication laboratories should offer expert instruction, opportunities for practice, and appropriate evaluation and feedback.

Because of scarce personnel and budgetary resources, however, many laboratories offer limited personalized instruction and no evaluation of communication activities.

Finally, the Radford and Rhode Island laboratories use a wide variety of instructional materials. In addition to commercially and locally prepared print, audio, and video resources, both laboratories provide one-on-one tutoring. Radford's OCP Laboratory also produces its own interactive video instructional programs. By combining the use of computerized interactive video instruction, and other instructional resources, the OCP Laboratory is able to offer quality, convenient, and cost-effective instruction, practice, and evaluation in a variety of oral communication areas for students, faculty, staff, and administrators throughout the university.

OCP LABORATORY PERSONNEL AND FACILITIES

Radford's Oral Communication Program is administered by a director and coordinator. The OCP Coordinator serves as Director of the OCP Laboratory. Daily operations of the laboratory are administered by a student coordinator, usually a graduate teaching fellow in the Department of Communication. This student is provided an office where he/she may meet with OCP tutors and clients. The student coordinator determines tutors' schedules and monitors laboratory operations. The student coordinator meets regularly with the Director of the Laboratory and prepares periodic reports on laboratory operations.

The OCP Laboratory provides a center for campus-wide assistance on oral communication instruction. A seminar room is available for meetings and discussions. This room also allows for videotaping oral presentations, group discussions, and debates. Other practice rooms in the communication laboratory allow for individual and small group rehearsal and taping. Viewing rooms provide space for clients to work with audiotape and videotape instruction. Computer rooms provide work stations where individuals or small groups may work with interactive instructional software or may use the computers to prepare presentation materials, such as outlines and visual aids. The facility includes an equipment room with studio cameras, camcorders, VCRs, videotape monitors, and other electronic paraphernalia.

THE TRAINING AND EFFECTS OF PEER TUTORS

Greenwood, Carta, and Hall (1988) defined tutoring procedures as "those in which peers are used to provide direct instruction to target peers" (p. 261). The Radford OCP Laboratory's tutors are upper-level undergraduate or graduate majors who have been trained in oral communication and tutoring. These students provide competent, individualized instruction to other students and are essential to the staffing of the OCP Laboratory.

Training OCP Peer Tutors

OCP tutors may include graduate teaching fellows in the communication department, senior-level undergraduates hired

to staff the laboratory, and students enrolled in COMM/SPCH 400: Communication Skills Tutoring. All tutors must have completed or be enrolled in this course. The course description reads:

> Principles and methods of training clients in the improvement of communication skills in such areas as public speaking, group discussion, and listening. Applied component of the course provides supervised consultation and tutoring experience.

Communication Skills Tutoring (CST) is a senior-level course that can be taken for undergraduate or graduate credit. Enrollment has ranged from four to ten students, and students are usually required to serve as tutors. A typical training program for CST students includes the following steps.

> 1. Students are given copies of the textbook used in SPCH 114, Radford's introductory public speaking course. They review their knowledge of the principles of public speaking and the SPCH 114 course textbook. The instructor supplements this knowledge through lecture, handouts, and discussion. At the end of the second week of class, students take a public speaking proficiency examination covering this information. Students have three chances to pass the examination with each subsequent attempt requiring a higher grade. If they do not pass by their third attempt, they are dropped from the class.

2. Students research articles on peer tutoring and share them with each other. Each student then writes an essay focusing on one aspect of tutoring.
3. Students learn how to operate laboratory equipment, such as video recording and playback equipment and interactive video instruction stations.
4. The instructor lectures on techniques of providing feedback on student speeches and oral presentations and provides CST students with a handout on critiquing strategies. Class members then observe videotapes of student speeches and discuss how they would evaluate the speeches' content and organization and the speaker's delivery.
5. Students research articles on providing evaluative feedback and write a summary of the suggested strategies.
6. As part of their first examination, students view a videotape of a student speech and then write a critique of the speech.
7. CST students are required to read "The Student as Communication Tutor: Ethical Dilemmas and Responsibilities" (Grice, Bird, & Dalton, 1990). The instructor then presents scenarios involving ethical considerations of students tutoring other students. Class members role-play these scenarios and a discussion follows.

8. The course instructor and laboratory coordinator(s) meet regularly to assess the quality of instruction and evaluation provided by the tutors. The instructor works with tutors to remediate any problems.

9. After the tutors complete their consulting experience, they submit a log of their activities and write a brief evaluation of their experiences. Class time is devoted to discussion of these experiences.

The Effects of Peer Tutoring

Scholarly research suggests that peer tutoring benefits both tutees and tutors. Fantuzzo, Dimeff, and Fox (1989), for example, found that tutored students received higher scores and experienced lower stress than did untutored students. Other studies also documented improved cognitive gains for tutees (Anderson & Smith, 1987; Annis, 1983; Greenfield & McNeil, 1987; Greenwood, Dinwiddie, Terry, Wade, Stanley, Thibadeau, & Delquadri, 1984; Labbo & Teale, 1990). Gahan-Rech, Stephens, and Buchalter (1989) reviewed the literature on the academic effects of peer tutoring and concluded:

> Numerous studies have recently been performed concentrating on the effects of tutoring on academic achievement. The majority of the research on tutoring measures the effects on the person receiving the tutoring, with generally positive results being reported. (p. 18)

Not only do those being tutored benefit, so do those providing the instruction. Bargh and Schul (1980) noted: "Somewhat surprisingly, in most cases the tutor showed even greater achievement gains than did the tutee as a result of the program" (p. 593). As one Radford tutor observed: "The best way to learn something thoroughly is to have to teach it to someone else."

Annis (1983) concluded in her review of the literature: "The peer tutoring studies which do exist appear to agree in finding achievement gains for both the tutor and tutee" (p. 39). Hedin (1987) noted that "tutoring is not a panacea for solving all problems of student motivation and passivity," but it is "a powerful educational tool for developing certain academic skills and for strengthening the tutor's personal development" (p. 14). Peer tutoring seems an appropriate pedagogy for communication competence training.

Radford's Oral Communication Program is grounded in the principle that instruction and evaluation in oral communication should be provided by those trained to do so. Competent tutoring is an important component in this process. Reliance on tutors as primary providers of a wide range of instruction to a large number of students, however, would pose a barrier to the program's success. Development of computerized interactive video instruction in oral communication is perhaps the most promising approach to supplementing training available in speech classes (Cronin & Cronin, in press).

THE DEVELOPMENT AND USE OF INTERACTIVE VIDEO

Most non-speech faculty have neither the time nor expertise to provide the oral communication training necessary in C-I classes. Even speech faculty find their class time limited. As speech class enrollments increase, the additional time needed for students' oral presentations forces instructors to curtail, or eliminate altogether, some class instruction and/or evaluation. The use of interactive video instruction (IVI) in a laboratory setting is one method of retaining or enhancing quality speech communication instruction.

IVI is capable of providing individualized, self-paced instruction to large numbers of students in a cost-effective manner. This state-of-the-art instruction uses computer and laser-disc technology to access video, text, and graphic information in response to the user's choices and responses.

IVI has proven to be as, or more, effective than conventional instruction in most academic areas. Cronin and Cronin's review of recent empirical studies of the effects of IVI on "soft skill" learning identified significant gains in student achievement across uncontrolled student characteristics for subjects taught via IVI compared to other instructional methods. "Significant improvements associated with IVI on cognition or application tests were identified in reading, management, study skills, interpersonal communication, organization and analysis of data, logical reasoning, foreign language, sales training,

production of TV graphic effects, photography, secondary education, special education, economics, art, and group dynamics" (Cronin & Cronin, in press).

By providing interactive video instruction in speech communication, the OCP Laboratory is able to enhance the teaching/learning process in speech and C-I classes. Instructors may select from a variety of interactive video instructional modules to enhance student learning of speech communication. This ensures expert instruction in speech communication in non-speech classes. Student use of IVI outside of class frees the speech and non-speech instructor to use class time to discuss other topics, or for performance and evaluation of oral communication activities. Students are able to access learning at times convenient to them and as often as they wish, something they cannot do with an in-class lecture.

Radford's OCP is developing and assessing interactive video instruction modules tailored specifically to students in OCXC and speech courses. Programs already in use in the OCP Laboratory include "Coping with Speech Fright," "Developing Key Ideas: The Four S's," "Constructing Speaking Outlines," and "Rehearsing and Performing with Speaking Notes." Additional programs being developed include "Critical Thinking: Supporting Your Ideas with Good Evidence," "Critical Thinking: Supporting Your Ideas with Good Reasoning," "Mission Possible: Listening Skills for

Better Communication," and "Developing Introductions and Conclusions to Speeches."

Preliminary experimental research on the pedagogical effects of three IVI programs in oral communication indicates that IVI can enhance oral communication competence.

Formative evaluations indicate that students enjoyed the level-III interactive video instruction (IVI) programs. Results of an immediate posttest, delayed posttest, control group design indicate that the IVI program "Coping with Speech Fright" appears to be as effective on speech fright and recall measures as lecture/linear videotape instruction by two outstanding public speaking instructors. Furthermore, students in the IVI condition achieved significantly higher immediate and delayed cognitive test scores than did students in the control group. Results of two separate studies using an immediate posttest, control group, comparison group design indicate that students receiving IVI in "Constructing Speaking Outlines" and "Developing Key Ideas: The Four S's" achieved significantly higher immediate recall/application test scores than did students in the control group or the comparison group. Regression analysis indicated no significant effects of novelty, GPA, IVI feedback rating, IVI video rating, or nature of participation (voluntary versus required) on cognitive test scores of

the IVI treatment group in either study. (Cronin, 1993, p. 2)

CONCLUSION

Leaders in education and business have recognized the importance of oral communication in enhancing both academic and career success. A well-designed, comprehensive speech communication laboratory can play an important role in promoting this competency.

Radford University's OCP Laboratory is designed to supplement oral communication instruction across the curriculum. Serving a broad university constituency, it uses a variety of pedagogically sound instructional materials to provide diverse oral communication instruction. By combining the use of peer tutoring, computerized interactive video instruction, and other instructional methods, the OCP Laboratory is able to provide sufficient instruction, structured practice, and competent evaluation to refine and reinforce students' oral communication competence. The key element in "making students talk" is the individualized, self-paced instruction offered via the OCP Laboratory.

REFERENCES

Anderson, O. S., & Smith, L. J. (1987). Peer tutors in a college reading laboratory: A model that works. Reading Improvement, 24, 238-247.

Annis, L. F. (1983). The processes and effects of peer tutoring. Human Learning, 2, 39-47.

Bargh, J. A., & Schul, Y. (1980). On the cognitive benefits of teaching. Journal of Educational Psychology, 72, 593-604.

Barker, L. (1980). An investigation of proportional time spent in various communication activities by college students. Journal of Applied Communication Research, 8, 101-109.

Bennett, J. (1984). Diverse sequence of courses focuses on problem-solving. Journalism Educator, 39(1), 23-26.

Boyer, E. L. (1987). College: The undergraduate experience in America. New York: Harper and Row.

Brownell, J. (1982) Elwood Murray's laboratory in interpersonal communication. Communication Education, 31, 325-332.

Brownell, W., & Watson, A. (1984, November). Creating a speech communication laboratory in a university retention program. Paper presented at the meeting of the Speech Communication Association, Chicago. (ERIC Document Reproduction Service No. ED 253 901)

Cronin, M. (1990, April). Debating to learn across the curriculum: Implementation and assessment. Paper

presented at the meeting of the Southern States Communication Association, Birmingham. (ERIC Document Reproduction Service No. ED 327 092)

Cronin, M. (1993, January). A review of experimental studies of interactive video instruction in oral communication. Paper submitted to the meeting of the Association for Educational Communications and Technology, New Orleans.

Cronin, M., & Cronin, K. (in press). Recent empirical studies of the pedagogical effects of interactive video instruction in "soft skills" learning. Journal of Computing in Higher Education.

Cronin, M., & Glenn, P. (1990a, June). Oral communication across the curriculum in higher education: Assessment, recommendations, and implications for the Speech Communication discipline. Paper presented at the meeting of the International Communication Association, Dublin. (ERIC Document Reproduction Service No. ED 327 095)

Cronin, M., & Glenn, P. (1990b, November). The Oral Communication Program: Program description and model proposal for a communication across the curriculum emphasis. Paper presented at the meeting of the Speech Communication Association, Chicago. (ERIC Document Reproduction Service No. ED 327 099)

Cronin, M., & Glenn, P. (1991). Oral communication across the curriculum in higher education: The state of the art. Communication Education, 40, 356-367.

Curtis, D. B., Winsor, J. L., & Stephens, R. D. (1989). National preferences in business and communication education. Communication Education, 38, 7-13.

Fantuzzo, J. W., Dimeff, L. A., & Fox, S. L. (1989). Reciprocal peer tutoring: A multimodal assessment of effectiveness with college students. Teaching of Psychology, 16, 133-135.

Gahan-Rech, J., Stephens, L., & Buchalter, B. (1989). The effects of tutoring on college students' mathematical achievement in a mathematics laboratory. Journal of Research and Development in Education, 22(2), 18-21.

Geonetta, S. (1981). The oral communication laboratory. In V. A. Book (Ed.). The Council for Programs in Technical and Scientific Communication Proceedings 1981 (pp. 24-35). Lincoln, NE: University of Nebraska-Lincoln, Department of Agricultural Communications. (ERIC Document Reproduction Service No. ED 252 869)

Glenn, P., Dobkins, D., Kennan, W., & Cronin, M. (1989, June). An oral communication program: Goals and implementation. Paper presented at the meeting of the Speech and Writing Conference of the Canadian Speech Communication Association, Ontario. (ERIC Document Reproduction Service No. ED 327 100)

Greenfield, S. D., & McNeil, M. E. (1987). The effects of an intensive tutor training component in a peer tutoring program. The Pointer, 31(2), 31-36.

Greenwood, C. R., Carta, J. J., & Hall, R. V. (1988). The use of peer tutoring strategies in classroom management and educational instruction. School Psychology Review, 17, 258-275.

Greenwood, C. R., Dinwiddie, G., Terry, B., Wade, L., Stanley, S. O., Thibadeau, S., & Delquadri, J. C. (1984). Teacher- versus peer-mediated instruction: An ecobehavioral analysis of achievement outcomes. Journal of Applied Behavior Analysis, 17, 521-538.

Grice, G., Bird, J., & Dalton, J. (1990, November). The student as communication tutor: Ethical dilemmas and responsibilities. Paper presented at the meeting of the Speech Communication Association, Chicago. (ERIC Document Reproduction Service No. ED 324 729)

Hay, E. (1988). Communication across the curriculum. Virginia Journal of Communication, 9, 1-19.

Hedin, D. (1987). Students as teachers: A tool for improving school climate and productivity. Social Policy, 17(3), 42-47.

Jones, A. (1987, November). Integrative negotiations. Paper presented at the meeting of the Joint Annual Conference of the Illinois Association of School Boards, Illinois Association of School Administrators, and Illinois Association of School Business Officials,

Chicago. (ERIC Document Reproduction Service No. ED 293 202)

Labbo, L. D., & Teale, W. H. (1990). Cross-age reading: A strategy for helping poor readers. The Reading Teacher, 43, 362-369.

Morris, B. (1987). The Baruch College solution: A laboratory for improving communication skills of non-native speakers of American English. Journal of Educational Techniques and Technologies, 20(1), 52-56.

Ratliffe, S. (1984, November). Interpersonal communication competencies and peer tutor-evaluators in the speech laboratory. Paper presented at the meeting of the Speech Communication Association, Chicago.

Ratliffe, S. (1989, November). Strategies for assessment of the basic undergraduate interpersonal communication course. Paper presented at the meeting of the Speech Communication Association, San Francisco. (ERIC Document Reproduction Service No. ED 310 831)

Roberts, C. V. (1983). Speaking and listening education across the curriculum. In R. B. Rubin (Ed.), Improving speaking and listening skills (pp. 47-58). San Francisco: Jossey-Bass.

Roberts, C. V. (1984, November). A report of a three year program in teaching communication skills across the curriculum. Paper presented at the meeting of the Speech Communication Association, Chicago.

Steinfatt, T. (1986). Communication across the curriculum. Communication Quarterly, 34, 460-470.